(Model.)

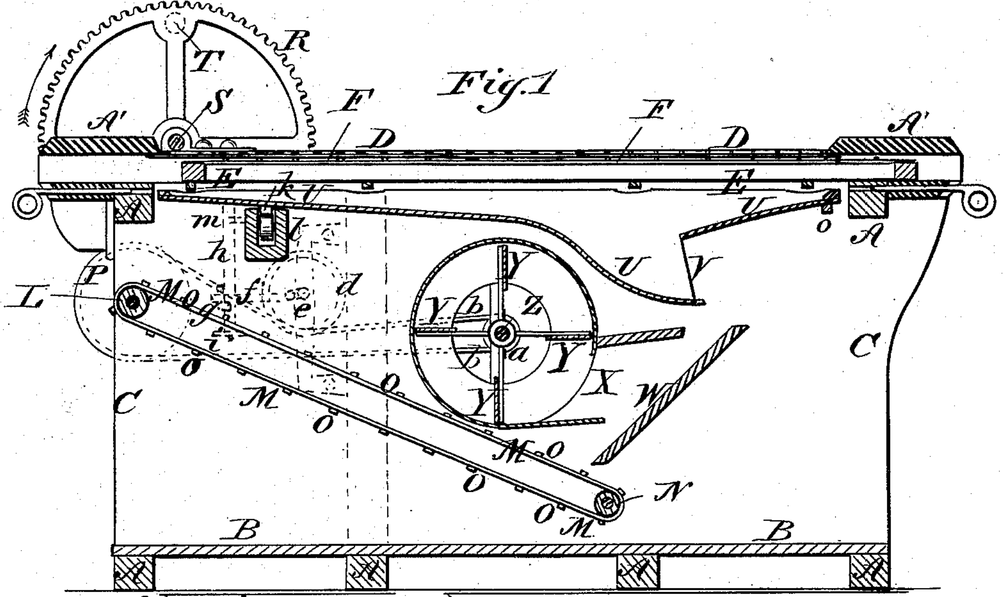
2 Sheets—Sheet 1.

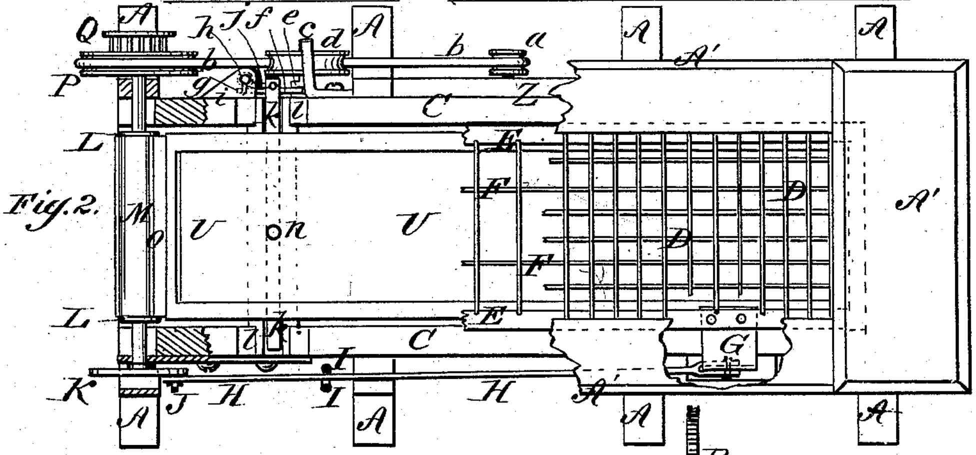
E. H. POWELL.

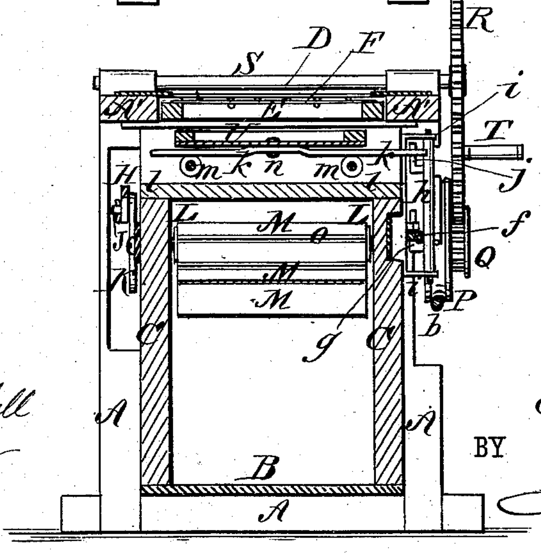
PEANUT PICKER AND CLEANER.

No. 252,136.

Patented Jan. 10, 1882.







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(Model.)

2 Sheets—Sheet 2.

E. H. POWELL.

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Fig. 4.

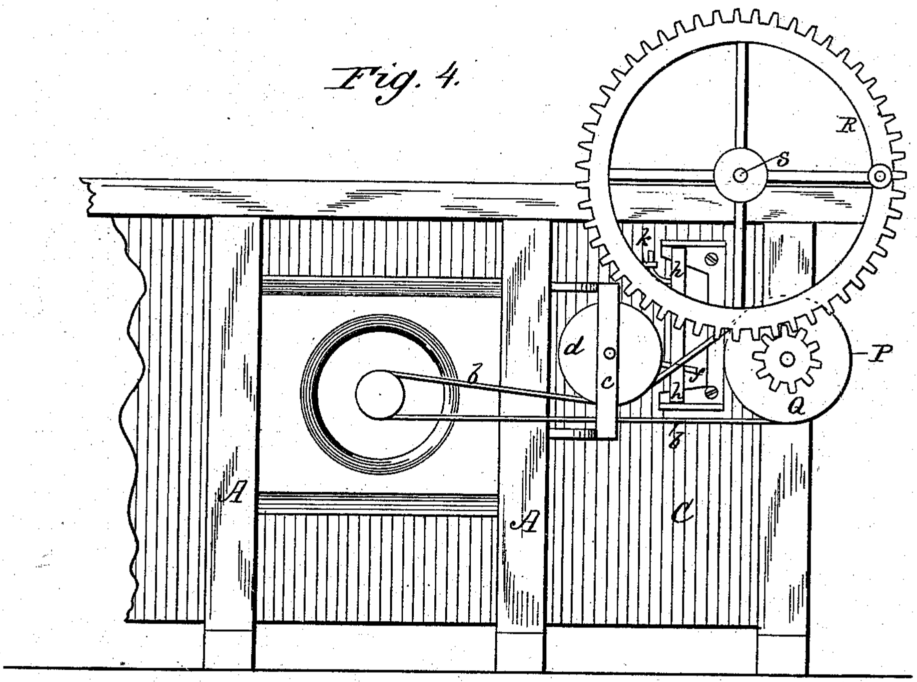
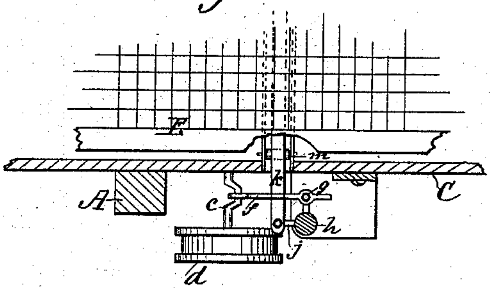


Fig. 5.



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UNITED STATES PATENT OFFICE.

EVERITT H. POWELL, OF BUCKHORN, VIRGINIA.

PEANUT PICKER AND CLEANER.

SPECIFICATION forming part of Letters Patent No. 252,136, dated January 10, 1882.

Application filed April 25, 1881. (Model.)

To all whom it may concern:

Be it known that I, EVERITT HENRY POWELL, of Buckhorn, in the county of Nansemond and State of Virginia, have invented a new and useful Improvement in Peanut Pickers and Cleaners, of which the following is a specification.

Figure 1 is a sectional side elevation of my improvement. Fig. 2 is a plan view, partly in section, of the same. Fig. 3 is a sectional end view of the same. Fig. 4 is a side view of a portion of the machine. Fig. 5 is a detail horizontal section.

Similar letters of reference indicate corresponding parts.

My invention is an improvement in that class of machines for removing peanuts from vines, and also cleaning them, which have fixed and vibrating screens and a vibrating shoe and fan-blower arranged beneath the same. I employ in addition to these an endless traveling apron or carrier for delivering the cleaned nuts into a receptacle provided for the purpose; but the particular feature of novelty and superiority of my machine consists in the combination and arrangement of parts whereby the aforesaid screens, shoe, apron, &c., are operated. The chief objects are to economize space and render the machine as compact as possible.

A is the frame of the machine, which is provided with a bottom, B, and side casings, C. To the top of the frame A, or to a frame, A′, secured to the said frame A, are attached woven or crossed wires D, the meshes of which are of such a size as to allow the peanuts to drop through them freely. Beneath the woven-wire screen D is placed a frame, E, to which is attached woven or crossed wires F, having meshes as large or larger than the screen D. The frame of the screen E F slides on cross-bars, cleats, or other ways attached to the frame A, the friction being relieved by rollers, and to it near its rear end, or to an arm or bracket, G, attached to it, is hinged the end of a rod, H, which passes through a guide or keeper, I, attached to the frame of the machine. The forward end of the rod H is pivoted to a crank-pin, J, attached to the wheel K. The crank-wheel K is attached to a journal of the roller L, around which passes an endless carrier-belt, M. The endless carrier-belt M also passes around a roller, N, pivoted to the lower rear part of the frame A. The endless belt M is provided with cross-bars or cleats O, to prevent the peanuts from slipping back while being carried up by the said belt. To the other journal of the roller L are attached a pulley, P, and a small gear-wheel, Q. Into the teeth of the small gear-wheel Q mesh the teeth of a large gear-wheel, R, attached to a shaft, S, which revolves in bearings attached to the frame A′.

To the gear-wheel R is attached a crank-pin, T, to serve as a handle when operating the machine by hand.

If desired, a pulley can be attached to the shaft S to receive a band from any convenient power.

With this construction, when the pea-vines are placed upon the screen D the nuts drop through the meshes of the two screens D and E F and are pulled or picked from the said vines by the vibration of the lower screen, E F. The peanuts fall from the screens upon the shoe U, which inclines from its ends toward a discharge-opening, V, in the rear part of the said shoe U. From the shoe U the peanuts fall upon an inclined board or plate, W, placed in the rear of and directly opposite the mouth of the discharge-spout X of the fan blower, and in such a position that the peanuts that slide down the said board W will fall upon the lower part of the carrier-belt M, by which they are carried up and discharged into a sack or other receiver at the forward end of the machine. The imperfect nuts and other impurities will be blown out by the air-blast from the fan-blower and will fall into the rear part of the machine, whence they can be removed when desired.

The fans Y are attached to a shaft, Z, which revolves in bearings attached to the frame A or casing C.

To one of the journals of the fan-shaft Z is attached a small pulley, *a*, around which passes an endless band, *b*, which also passes around the pulley P.

To brackets *c* or other supports attached to the frame A or casing C is journaled a pulley, *d*, in such a position that the said pulley will rest upon the upper part of the band *b* with sufficient force to be revolved by the movement of the said band.

Upon the inner journal of the pulley *d* is formed, or to it is attached, a crank, *e*, to which is pivoted the end of a short connecting-rod, *f*. The other end of the connecting-rod *f* is pivoted to a crank, *g*, attached to the vertical shaft *h*. The crank *g* is made so much longer than the crank *e* that the shaft *h* will be rocked by the revolution of the pulley *d*. The shaft *h* is journaled to brackets *i*, attached to the casing C or frame A, and to the upper part of the said shaft *h* is attached a crank, *j*, to which is pivoted the end of a cross-bar, *k*. The cross-bar *k* is placed in a grooved bar or open box, *l*, attached to the frame A. The cross-bar *k* rests upon rollers *m*, pivoted to the said bar or box *l*, and is connected by a pivoting-pin, *n*, with the forward part of the shoe U, so that the said shoe will be vibrated from the driving-gearing of the machine to feed the peanuts down to the discharge-opening of the said shoe. The rear end of the shoe U rests and works upon a cross-bar, *o*, attached to the frame A.

The frame A′ can be detachably secured to the frame A, for convenience in having access to the interior of the machine when required.

By the above-described combination and arrangement of the gearing Q R, pulleys *d* P, band *b*, rock-shaft *h*, fan-shaft, &c., all the required movements are imparted to the apron M, screen D, and shoe U by rotating the gear R, and the latter is so placed as not to project beyond the end of the case C, so that the machine is compact, and can be shipped and used without danger of injury to said gear by contact with other objects.

What I claim is—

1. The combination, with the case C, movable screen E F, bar *k*, shoe U, fan Y, traveling apron M, and rollers L N, all arranged within the case, as specified, of the following parts, which are arranged on the side of the latter, to wit: the rotating gear R, pinion Q, pulleys P *d a*, band *b*, vertical rock-shaft *h*, connected with said pulley *d* and bar *k*, the rod H, and wheel K, as shown and described, for the purpose specified.

2. The combination, with case C, the vibrating shoe U, its attached bar *k*, and rollers supporting the same, of the rock-shaft *h*, having cranks *g* and *j*, the pulley *d*, crank *e*, connecting-rod *f*, and the mechanism for imparting rotation to said pulley, as shown and described, for the purpose specified.

EVERITT HENRY POWELL.

Witnesses:
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CHARLES J. POWELL.